

CLAIM REJECTIONS – 35 USC 112

According to the Office Action, ‘Claim 14 is rejected under 35 USC 112, second paragraph... it is unclear what “synchronous transferring a first group” and “synchronous transferring a second group” is synchronized to.’

Claim 14 is now amended in the CLAIMS LISTING (AMENDMENT) section above, in particular, as follows:

‘ ... - synchronous transferring said display interrogation signals for said areas each, wherein said display interrogation signals carry encoding information on the boundaries of said each area, said transferring the display interrogation signals is provided to said electronic beam deflector, ***said synchronous transferring of said display interrogation signals is provided synchronously with the entire frame video image***; and

- synchronous transferring said display interrogation signals for said areas each, wherein said display interrogation signals carry encoding information on the quality levels of said areas, and said transferring the display interrogation signals is provided to said size screen dot unit, ***said synchronous transferring of said display interrogation signals is provided synchronously with the entire frame video image***. ’

Therefore, the display interrogation signals are synchronized with the entire frame video image.

CLAIM REJECTIONS – 35 USC 102

According to the Office Action, ‘Claims 1 – 6 are rejected under 35 USC 102(e), as being anticipated by Keeney et al (US007027655B2).’

Claims 1, 3, and 5 have been amended as written in the CLAIMS LISTING (AMENDMENT) section above. Claims 1, 3, and 5 now differ from Keeney, since they include novel features that are not taught by Keeney (please see the REMARKS section below).

Claims 1, 3, 7, 10, and 15 are now presented in the independent form.

Claims 2, 4, 6, 12-13, 16, and 20 have been canceled herein.

CLAIM REJECTIONS – 35 USC 103

According to the Office Action, ‘Claim 14 is rejected under 35 USC 103 as being unpatentable over Keeney et al (US007027655B2) in view of Griepentrog (US0058944327A.)’

Claim 14 is now amended as shown in the CLAIMS LISTING (AMENDMENT) section above. Claim 14 includes novel features not taught by Keeney and Griepentrog, which novel features produce a new and unexpected result as explained in the REMARK section below. Thusly, claim 14 should be considered unobvious to one skilled in the art, and therefore patentable under 35 USC 103 over the cited prior art.

REMARKS

1. Regarding Claim 1, it is now rewritten to more particularly recite novel features and limitations distinct from and not available in Keeney. In particular:

‘A method of interactive television wherein video signals are generated based on real time user perception of video images comprising the steps of:

- forming a video signal of an entire frame of an initial video image in a video signal formation component, said initial video image has a predetermined quality level and predetermined dimension; ...

*- **converting said quality levels of said sector video signals, such that a corresponding quality level of at least one said sector video image is successively reduced**, said conversion is provided in said intermediate conversion components; ...’*

The above limitation typed in bold is ultimately absent in Keeney, and therefore cannot be anticipated by Keeney. Furthermore:

‘... - transmitting said display interrogation signals to one of a plurality of computing components of a second type, connected to said group-user intermediate conversion component;

*- **transmitting said display interrogation signals immediately to said user display component; ...’***

The above limitation typed in bold is ultimately absent in Keeney, and therefore cannot be anticipated by Keeney. Claim 1 is therefore **patentable** under 35 USC 102 over the cited prior art.

2. Regarding Claim 3, it is now rewritten in the independent form and more particularly recites novel features and limitations distinct from and not available in Keeney. In particular:

‘... - transmitting said display interrogation signals to a plurality of computing component of a second type, connected to said group-user intermediate conversion component;

*- **transmitting said display interrogations signals immediately to said user display component; ...’***

The above limitation typed in bold is ultimately absent in Keeney, and therefore cannot be anticipated by Keeney. Claim 3 is therefore **patentable** under 35 USC 102 over the cited prior art.

3. Regarding Claim 5: it now depends from the currently amended independent Claim 3, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claim 5 includes its own limitations in addition to the limitations of the independent Claim 3, Claim 5 is fortiori **patentable** under 35 USC 102 over the cited prior art.

4. Regarding Claim 7, it is now rewritten in the independent form, and is no longer ‘dependent upon a rejected base claim’ (the old claim 5 that depended from the old claim 1 rejected by the instant Office Action). Therefore, according to the ‘Allowable Subject Matter’ section of the instant Office Action, Claim 7 is now **allowable**.

5. Regarding Claims 8 and 9: they now depend from the currently amended Claim 3, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claims 8 and 9 include their own limitations in addition to the limitations of the independent Claim 3, they are fortiori **patentable** under 35 USC 102 over the cited prior art.

6. Regarding Claim 10, it is now rewritten in the independent form and more particularly recites novel features and limitations distinct from and not available in Keeney. In particular:

*‘... - transmitting said display interrogation signals to a plurality of computing component of a second type, connected to said group-user intermediate conversion component;
- **transmitting said display interrogations signals immediately to said user display component;** ...’*

The above limitation typed in bold is ultimately absent in Keeney, and therefore cannot be anticipated by Keeney. Claim 10 is therefore **patentable** under 35 USC 102 over the cited prior art.

7. Regarding Claim 11: it now depends from the currently amended Claim 10, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claim

11 includes its own limitations in addition to the limitations of the independent Claim 10, Claim 11 is fortiori **patentable** under 35 USC 102 over the cited prior art.

8. Regarding Claim 14: it now depends from the currently amended Claim 3, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claim 14 includes its own limitations in addition to the limitations of the independent Claim 3, Claim 14 is fortiori **patentable** under 35 USC 102 over the cited prior art.

Moreover, the limitations of Claim 14 effect a new and unexpected result not available in Keeney and Griepentrog, or in any combination thereof. Keeney's device, as well as other conventional devices in the related art, contemplate a conversion component to convert the entire frame video signal. The inventive structure recited in Claim 14 does not envisage such conversion, and such conversion component. It rather provides for: (a) transferring video signals with different quality levels to the gun-cathode; (b) transferring the display interrogation signals, carrying encoding information on the boundaries of each area of the video image, to the electronic beam deflector, synchronously with the entire frame video image; and (c) transferring the display interrogation signals, carrying encoding information on the quality levels of the areas, to the size screen dot unit, synchronously with the entire frame video image. These features result in a significant reduction of the power consumed by the device that in turn causes a reduction of harmful influence of the electronic beam onto the user's health.

According to Keeney (Fig.2), a decoder (95) transmits a standard video signal to a monitor (10'), which may not cause any reduction of power. The Q-map introduced by Keeney, however, is not transmitted to the monitor 10'. As to Griepentrog, it does not teach any signal transmitted to the monitor, which signal might control the boundaries of an image area.

Therefore, any combination of teachings of Keeney and Griepentrog could not produce the aforementioned result, which makes this result unexpected and thusly unobvious to a skilled artisan. Then, Claim 14 should be deemed **patentable** under 35 USC 103 over the cited prior art.

9. Regarding Claim 15, it is now rewritten in the independent form, and is no longer 'dependent upon a rejected base claim' (the old claim 5 that depended from the old claim 1 rejected by the

instant Office Action). Therefore, according to the 'Allowable Subject Matter' of the instant Office Action, Claim 15 is now **allowable**.

10. Regarding Claim 17, it now depends from the currently amended Claim 10, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claim 17 includes its own limitations in addition to the limitations of the independent Claim 10, Claim 17 is fortiori **patentable** under 35 USC 102 over the cited prior art.

11. Regarding Claim 18, it depends from Claim 7, now amended in the independent form, and submitted above to be allowable based on the 'Allowable Subject Matter' section of the instant Office Action. Therefore, Claim 18, containing additional features and limitations, is also **allowable** based on to the 'Allowable Subject Matter'.

12. Regarding Claim 19, it now depends from the currently amended Claim 10, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claim 19 includes its own limitations in addition to the limitations of the independent Claim 10, Claim 19 is fortiori **patentable** under 35 USC 102 over the cited prior art.

13. Regarding Claim 21: it now depends from the currently amended Claim 10, submitted above to contain novel features and limitations distinct from and not available in Keeney. Since Claim 21 includes its own limitations in addition to the limitations of the independent Claim 10, Claim 21 is fortiori **patentable** under 35 USC 102 over the cited prior art.

14. Applicants have made diligent efforts to amend the instant claims, so that they define novel steps, which also render the claimed methods unobvious. However, if the specification and claims are not believed to be in full condition for allowance, Applicants respectfully request the constructive assistance of the Examiner. Therefore, reconsideration and allowance of the amended claims of the instant application are hereby respectfully requested.

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